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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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CONTINENTAL TEVES, INC. ONE CONTINENTAL DRIVE AUBURN HILLS, MI 48326-1581			EXAMINER WILLIAMS, THOMAS J	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,022	Applicant(s) SCHMIDT ET AL.	
	Examiner Thomas J. Williams	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-58 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 38-58 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/15/06</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

1. Acknowledgment is made in the receipt of the preliminary amendment, the priority papers and information disclosure statement filed June 15, 2006 and the oath filed April 9, 2007.
2. The drawings were received on June 15, 2006. These drawings are accepted.

Claim Objections

3. Claims 40 and 44 are objected to because of the following informalities: Claim 40 line 3, the phrase "yawl" should be replaced with "yaw"; claim 44 line 1, the phrase "angle" should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 54, 57 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 6. Claim 54 recites the limitation "the brake pressure ratio" in line 2. There is insufficient antecedent basis for this limitation in the claim.
 7. Claim 57 recites the limitation "the brake pressure difference" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.
- Claim 58 is rejected due to its dependence upon claim 57.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 38-41, 46, 48-52 and 56-58 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,934,769 to Brachert et al.

Re-claims 38 and 49-51, Brachert et al. disclose a method for controlling a brake pressure, the method comprising: determining a low coefficient of friction side (low μ) and a high coefficient of friction side (high μ) of the vehicle, see figure 4; forming a stability index (stability value $fzstab_{ist}$); the wheel pressures at each wheel (one associated with the low μ and the other associated with the high μ) are used to determine the stability index, see column 4 lines 56-62; the brake pressure at at least one wheel is modified in accordance with a comparison of the stability index with a threshold value (i.e. a nominal value), see figure 4 and column 4 lines 62-67; the brake pressure difference between the two wheels is limited.

Re-claim 39, see column 1 lines 47-54.

Re-claims 40 and 41, see column 4 lines 53-56, the actual yaw rate (or velocity) values are compared.

Re-claim 46, Brachert et al. disclose that it is known to use transverse acceleration values (broadly interpreted as lateral acceleration) as a measure of stability, see column 1 lines 40-45.

Re-claim 48, see step 504, a sign change is determined.

Re-claim 52, the nominal stability value is a function of longitudinal velocity, or speed of the vehicle, and as such limits the brake pressure difference, see column 4 lines 64-65.

Re-claim 56, the change in brake pressure takes place during straight ahead driving as well as during cornering events.

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Re-claim 57, the pressure increases are carried out more slowly than decreases, see figure 4, the rear wheel increase is limited during cornering events as disclosed in column 1 lines 40-45.

Re-claim 58, the yaw is determined by a yaw rate sensor.

10. Claims 38-43, 45, 49, 55 and 56 re rejected under 35 U.S.C. 102(b) as being anticipated by US 2003/0111899 A1 to Heinemann.

Re-claims 38-43, 45 and 49, Heinemann discloses a method for controlling a brake pressure, the method comprising: determining a low coefficient of friction side and a high coefficient of friction side of the vehicle, see paragraph 3; forming a stability index (such as yaw values and steering angle values); the stability index is evaluated based on a differential pressure between two wheels on one axle, see paragraph 30; the brake pressure at at least one wheel is modified in accordance with a comparison of the stability index with a threshold value (the deviation value is compared to a threshold value, such as Lim1); the brake pressure difference between the two wheels is limited.

Re-claim 55, a brake pressure difference is set to zero when a change in yaw speed changes beyond a limit value, the yaw speed change is dependent upon mu conditions.

Re-claim 56, differential pressure increase is allowed as yaw speed values drop, this is indicative of increased vehicle stability as well as straight ahead driving.

11. Claims 38, 39, 46, and 49-54 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,968,920 to Barton et al.

Re-claims 38, 39, 49 and 50, Barton et al. disclose a method for controlling a brake pressure, the method comprising: determining a low coefficient of friction side and a high coefficient of friction side of the vehicle, see abstract; forming a stability index (such as steer

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angle, see column 3 lines 55-67); the wheel pressures at each wheel are used to determine the stability index, see column 3 lines 61-63; the brake pressure at at least one wheel is modified in accordance with a comparison of the stability index with a threshold value, see column 8 (assessment of vehicle stability).

Re-claims 51-54, the rear axle values are discussed in column 11 lines 4-63, column 12 lines 63-67 to column 13 lines 1-26.

Re-claim 46, a lateral drift compensation uses a lateral acceleration signal are used to adjust the stability index.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 44 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinemann in view of US 2002/0198646 A1 to Bedner et al.

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Re-claim 44, Heinemann fails to teach the nominal steering angle containing a control component, understood as an additional steering torque (as per the specification). Bedner et al. teach a stability control in which an additional steering torque or steering correction is added as a control component, see paragraph 13. It would have been obvious to one of ordinary skill in the art to have provided the method of Heinemann with an additional means of controlling vehicle stability via an additional control component as taught by Bedner et al., thereby enhancing vehicle stability control.

Re-claim 47, Heinemann fails to teach the stability index being determined as a function of a sideslip angle or sideslip angle velocity. Bedner et al. teach an enhancement of vehicle stability by utilizing a side slip value, see paragraph 17. It would have been obvious to one of ordinary skill in the art to have provided the method of Heinemann with a means of taking into consideration a sideslip value as taught by Bedner et al., thereby improving the stability enhancement of the vehicle during travel.

15. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brachert et al. or Barton et al. in view of Bedner et al.

Brachert et al. and Barton et al. each fail to teach the stability index being determined as a function of a sideslip angle or sideslip angle velocity. Bedner et al. teach an enhancement of vehicle stability by utilizing a side slip value, see paragraph 17. It would have been obvious to one of ordinary skill in the art to have provided the method of either Brachert et al. with Barton et al. with a means of taking into consideration a sideslip value as taught by Bedner et al., thereby improving the stability enhancement of the vehicle during travel.

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Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wupper, Oikawa et al., Okubo, and Bach et al. each teach a stability control, wherein a vehicle stability condition is determined based upon a comparison with a threshold value.

17. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is 571-272-7128.

The examiner can normally be reached on Wednesday-Friday from 6:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi, can be reached at 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-6584.

TJW

/Thomas J. Williams/
Primary Examiner, Art Unit 3657

October 2, 2009